IN THE CLAIMS

Claims 1-4 are withdrawn.

5. (Two times amended) A method for manufacturing a semiconductor device comprising:

forming an insulating layer having a contact hole therethrough on a semiconductor substrate;

forming a diffusion barrier layer on a surface of the insulating layer and on surfaces within the contact hole; [and]

[forming a contact plug in the contact hole by forming a first sub-plug that fills a lower portion of the contact hole and forming a second sub-plug that fills an upper portion of the contact hole on the first sub-plug,]

[wherein the first sub-plug fills a lower portion of the contact hole to a level substantially below a top surface of the insulating layer]

forming a first metal layer on the insulating layer having the contact hole therethrough, the first metal layer having a void therein below a top surface of the insulating layer;

etching back the first metal layer to the depth of the void to form a first sub-plug without the void in a lower portion of the contact hole; and

forming a second sub-plug that fills an upper portion of the contact hole on the first sub-plug.

Cancel claim 6, without prejudice.

7. (Original) The method for manufacturing a semiconductor device of claim 5, wherein forming a second sub-plug comprises forming a second metal layer on the semiconductor substrate on which the first sub-plug has been formed and polishing the second metal layer so as to expose a top surface of the diffusion barrier layer on the insulating layer.

8. (Original) The method for manufacturing a semiconductor device of claim 6, wherein forming a second sub-plug comprises forming a second metal layer on the

semiconductor substrate on which the first sub-plug has been formed and polishing the second metal layer so as to expose a top surface of the diffusion barrier layer on the insulating layer.

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9. (Original) The method for manufacturing a semiconductor device of claim 5, wherein the first sub-plug is formed of tungsten.

10. (Original) The method for manufacturing a semiconductor device of claim 5, wherein the second sub-plug is formed of one of tungsten and titanium nitride.

11. (Original) The method for manufacturing a semiconductor device of claim 5, wherein the second sub-plug is formed to a thickness no greater than 1000 Å.

12. (Original) The method for manufacturing a semiconductor device of claim 5, wherein the diffusion barrier layer is formed of titanium/titanium nitride.

13. (Previously added) The method of claim 5, wherein the plug formed in the contact hole contacts a surface of the semiconductor substrate.

14. (Previously added) The method of claim 8, wherein the first metal layer is a metal layer capable of generating a void in the contact hole.

15. (Previously added) The method of claim 8, wherein the second metal layer is formed by atomic layer deposition.